

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with David A. Bilodeau, Attorney for Applicants, on November 24, 2008.

2. The claims have been amended as follows:

In **claim 1**, line 15, the word --in-- has been inserted between the word "installed" and the word "the";

In **claim 1**, line 18, the word "and", which immediately follows the comma, has been deleted;

In **claim 1**, line 20, the period at the end of this line has been deleted and a comma has been added in its place;

In **claim 1**, line 20, the following clause has been inserted after the newly added comma: --wherein the flow separating means further comprises a blunt body placed inside the conduit to form two separated flow paths inside the conduit, and wherein the at least one sink has a same width as a width of the blunt body.--

Claim 2 has been cancelled.

In **claim 6**, line 1, claim number "2" has been deleted and claim number --1-- has been added in its place;

In **claim 12**, line 12, the word --in-- has been inserted between the word “installed” and the word “the”;

In **claim 22**, line 2, the word “the”, which immediately precedes the word “space”, has been deleted and the words --in a-- have been added in its place.

REASONS FOR ALLOWANCE

3. The following is an examiner’s statement of reasons for allowance:

The prior art references, neither alone or in combination, disclose, teach or suggest a flow spreading mechanism having the combination of elements recited in independent claims 1, 12, 18, and 22.

Specifically, with respect to independent claims 1, 12, 18, and 22, the closest prior art is considered to be that of Stouffer (US 4,151,955). While Stouffer may disclose some of the claimed limitations, claims 1, 12, 18, and 22 are clearly patentable over the Stouffer reference because this reference fails to disclose, teach, or suggest at least the following claimed elements: (a) *at least one sink* installed at a predetermined location inside the space, wherein (b) the at least one sink includes an opening for discharging fluid inside the space to the outside, and (c) the at least one sink has a *same width* as a *width of the blunt body*. The specification of this application explicitly provides that the width of the opening of the sinks is made the same as the width of the blunt body (plate) in order to achieve an optimized heat transfer effect in the space. Refer to the specification of this application, page 12, lines 1-11.

Moreover, one of ordinary skill in the art would have no reasonable motivation for modifying the Stouffer reference so as to overcome the deficiencies recited above. For example, one of ordinary skill in the art would have no motivation to add a sink to the oscillating spray

device disclosed in Stouffer because this device is used for dispersing a fluid (e.g., paint or windshield wiper fluid) over an area or linear target in an open space. See Stouffer, Figures 39-40 and column 2, lines 6-12. Consequently, the addition of a sink would do nothing to enhance the performance, or the utility, of the Stouffer device. Thus, because one of ordinary skill in the art would not even be motivated to add a sink to the oscillating spray device of Stouffer at all, one of ordinary skill in the art certainly would have no reasonable motivation to provide a sink having the same width as the blunt body (island) disclosed in Stouffer. Therefore, because the closest prior art fails to disclose, teach, or suggest numerous limitations set forth in claims 1, 12, 18, and 22, and there is no reasonable motivation for one of ordinary skill in the art to modify the closest prior art reference (Stouffer) in such a way so as to cure these deficiencies, independent claims 1, 12, 18, and 22 of this application are clearly patentable over the prior art.

In regard to dependent claims 6, 8-11, 13-15, 17, 23, and 26, these claims are allowable as being dependent, either directly or indirectly, upon allowable independent claims 1, 12, and 22.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick F. O'Reilly III whose telephone number is (571) 272-3424. The examiner can normally be reached on Monday through Friday, 8:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven B. McAllister can be reached on (571) 272-6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Patrick F. O'Reilly III/
Examiner, Art Unit 3749

/Steven B. McAllister/
Supervisory Patent Examiner, Art Unit 3749